$\bar{v} = \frac{v_0 + v_{total}}{2}$

$v = v_0 + \frac{at}{2}$

$S = v_0 t + \frac{1}{2} a t^2$

velocity of light $= 3 \times 10^8$ m/sec

1 troy oz $= 32$ g

1 m/sec $= 3.6$ km/hr $= \frac{6}{2.7}$ mph

Signif figures - Only good for ANALOG. Cannot cut. Last digit shows estimate

velocity eqd to dir

displacement

S = displacement

$F = kx$ Force = (Energy per)

$S = \bar{v} t$

sec	sec
0	0
2	1
4	2
6	3
8	4
10	5

force — exceed elastic limit = N / Elon

2 m/sec/sec = acceleration

2 m/sec^2

$A = \frac{v}{t}$ $v = \frac{s}{t}$

DISPL, TIME GRAPH.

area of Δ = displ

S = displacement

t = time

V = velocity

a = acceleration

$\bar{v} = \frac{v_0 + v_f}{2}$ constant duh!

$a = \frac{\Delta v}{\Delta t}$ or $v_f = v_0 + at$

$S = v_0 t + \frac{1}{2} a t^2$

$v_f^2 = v_0^2 + 2as$

$v_f = v_0 + at$

$v_f = v_0 + \frac{2s}{v_0 + v_f}$

$v_f = v_0 + 2as / v_0 + v_f$

$v_0 + v_f^2 = v_0^2 + 2as + v_f^2$

$2v = v_0 + v_f$ (EQ 2)

$(at = v_f - v_0)$ (EQ 3)

$2vat = v_f^2 - v_0^2$

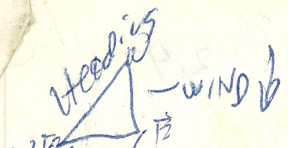
$2 \frac{s}{t} at = v_f^2 - v_0^2$

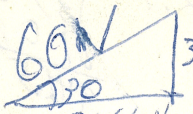
$2 \cdot s a = v_f^2 - v_0^2$

$v_f^2 = 2as + v_0^2$

liter = cubic decimeter = cubic meters

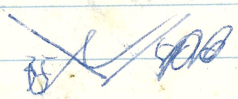
1 Kg = 1 liter of water

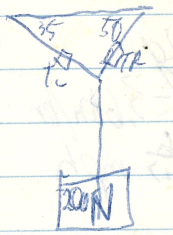


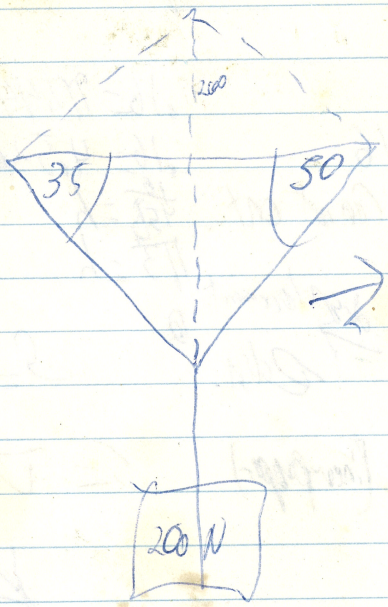


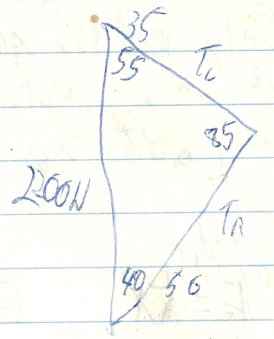
use $F_y = R\sin\theta$ (θ to +)

$F_x = R\cos\theta$ (θ to +)









Use Sine Law

$$\frac{\sin 85}{200} = \frac{\sin 40}{T_L} = \frac{\sin 55}{T_R}$$